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## ABSTRACT OF THE DISCLOSURE

A method and apparatus for calibrating a Gm cell using a Gm replica cell.

A digital to analog converter receives a Gm setting code and generates a reference current. The Gm replica cell adjusts the tuning voltage until the difference between a pair of drain currents is substantially equal to the reference current.

Where this condition is satisfied, the proper tuning voltage has been acquired. This results in proper calibration for the tuning voltage, which then may be utilized by a Gm cell connected with the Gm replica cell.